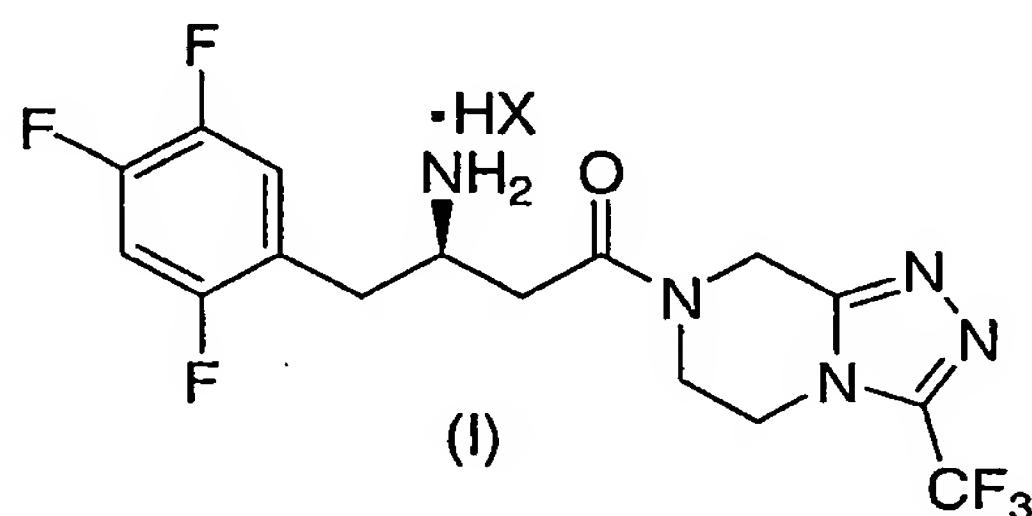


## WHAT IS CLAIMED IS:

1. A crystalline salt of (2*R*)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-*a*]pyrazin-7(8*H*)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine of  
5 structural formula I:



or a hydrate thereof;

wherein HX is an acid selected from the group consisting of hydrochloric acid, tartaric acid, benzenesulfonic acid, *p*-toluenesulfonic acid, and 10-camphorsulfonic acid.

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2. The crystalline salt of Claim 1 wherein said acid is hydrochloric acid.

3. The crystalline salt of Claim 1 wherein said acid is benzenesulfonic acid.

15 4. The crystalline salt of Claim 1 wherein said acid is *p*-toluenesulfonic acid.

5. The crystalline salt of Claim 1 wherein said acid is tartaric acid.

6. The crystalline salt of Claim 1 wherein said acid is 10-camphorsulfonic acid.

20 7. The crystalline salt of Claim 5 wherein said tartaric acid is L-tartaric acid.

8. The crystalline salt of Claim 5 wherein said tartaric acid is D-tartaric acid.

25 9. The crystalline salt of Claim 6 wherein said 10-camphorsulfonic acid is (1*S*)-(+)10-camphorsulfonic acid.

10. The crystalline salt of Claim 6 wherein said 10-camphorsulfonic acid is (1*R*)-(--)10-camphorsulfonic acid.

11. The crystalline hydrochloric acid salt of Claim 2 characterized as being a monohydrate.

5 12. The crystalline hydrochloric acid salt of Claim 11 characterized by characteristic reflections obtained from the X-ray powder diffraction pattern at spectral d-spacings of 3.0, 3.3, 3.5, 6.5, and 11.0 angstroms.

10 13. The crystalline hydrochloric acid salt of Claim 12 further characterized by the X-ray powder diffraction pattern of FIG. 1.

14. The crystalline hydrochloric acid salt of Claim 11 further characterized by the differential scanning calorimetric (DSC) curve of FIG. 3.

15 15. The crystalline hydrochloric acid salt of Claim 11 further characterized by the thermogravimetric analysis (TGA) curve of FIG. 2.

16. The crystalline L-tartaric acid salt of Claim 7 characterized as being a hemihydrate.

20 17. The crystalline L-tartaric acid salt of Claim 16 characterized by characteristic reflections obtained from the X-ray powder diffraction pattern at spectral d-spacings of 3.2, 3.4, 3.8, 4.1, 4.3, 4.9, and 5.8 angstroms.

25 18. The crystalline L-tartaric acid salt of Claim 17 further characterized by the X-ray powder diffraction pattern of FIG. 4.

19. The crystalline L-tartaric acid salt of Claim 16 further characterized by the differential scanning calorimetric (DSC) curve of FIG. 6.

30 20. The crystalline L-tartaric acid salt of Claim 16 further characterized by the thermogravimetric analysis (TGA) curve of FIG. 5.

35 21. The crystalline benzenesulfonic acid of Claim 3 characterized as being an anhydrate.

22. The crystalline benzenesulfonic acid salt of Claim 21 characterized by characteristic reflections obtained from the X-ray powder diffraction pattern at spectral d-spacings of 3.4, 3.7, 4.0, 4.6, 4.8, 5.2, and 12.7 angstroms.

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23. The crystalline benzenesulfonic acid salt of Claim 22 further characterized by the X-ray powder diffraction pattern of FIG. 7.

24. The crystalline benzenesulfonic acid salt of Claim 21 further characterized by the 10 differential scanning calorimetric (DSC) curve of FIG. 9.

25. The crystalline benzenesulfonic acid salt of Claim 21 further characterized by the thermogravimetric analysis (TGA) curve of FIG. 8.

15 26. The crystalline *p*-toluenesulfonic salt of Claim 4 characterized as being an anhydrate.

27. The crystalline *p*-toluenesulfonic acid salt of Claim 26 characterized by characteristic reflections obtained from the X-ray powder diffraction pattern at spectral d-spacings of 3.9, 4.3, 4.5, 5.1, 5.7, 5.9, 7.6, and 15.0 angstroms.

28. The crystalline *p*-toluenesulfonic acid salt of Claim 27 further characterized by the X-ray powder diffraction pattern of FIG. 10.

25 29. The crystalline *p*-toluenesulfonic acid salt of Claim 26 further characterized by the differential scanning calorimetric (DSC) curve of FIG. 12.

30. The crystalline *p*-toluenesulfonic acid salt of Claim 26 further characterized by the thermogravimetric analysis (TGA) curve of FIG. 11.

30 31. The crystalline (1*S*)-(+)10-camphorsulfonic acid salt of Claim 9 characterized in being an anhydrate.

32. The crystalline (1*S*)-(+) -10-camphorsulfonic acid salt of Claim 31 characterized by characteristic reflections obtained from the X-ray powder diffraction pattern at spectral d-spacings of 3.4, 3.5, 4.0, 5.1, 5.3, 6.3, and 13.5 angstroms.

5 33. The crystalline (1*S*)-(+) -10-camphorsulfonic acid salt of Claim 32 further characterized by the X-ray powder diffraction pattern of FIG. 13.

34. The crystalline (1*S*)-(+) -10-camphorsulfonic acid salt of Claim 31 further characterized by the differential scanning calorimetric (DSC) curve of FIG. 15.

10 35. The crystalline (1*S*)-(+) -10-camphorsulfonic acid salt of Claim 31 further characterized by the thermogravimetric analysis (TGA) curve of FIG. 14.

15 36. A pharmaceutical composition comprising a therapeutically effective amount of a salt according to Claim 1 in association with one or more pharmaceutically acceptable carriers or excipients.

37. A method of treating Type 2 diabetes comprising administering to a mammal in need of such treatment a therapeutically effective amount of a salt according to Claim 1.

20 38. Use a salt according to Claim 1 as active ingredient in the manufacture of a medicament for use in the treatment of Type 2 diabetes in a mammal.